REMARKS

Claims 1 – 16 and 18 – 32 are pending. Claims 17 and 33 – 41 are canceled without prejudice or disclaimer. Applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Certain of the claims have been amended to correct minor grammatical errors and to otherwise place the claims in proper idiomatic format. No claims have been amended as a result of any rejection issued by the Examiner.

Claims 1 – 7 were rejected under 35 USC 102(b) as being anticipated by Uchikawa et al. (U.S. Patent No. 5,006,221). This rejection is respectfully traversed.

Claim 1 as amended recites:

A ceramic catalyst body comprising a ceramic carrier capable of supporting a catalyst component directly on the surface of a ceramic substrate and a catalyst supported on the ceramic carrier, wherein catalyst particles are provided with a layer containing an anti-evaporation metal formed at least in part of the outer surface thereof.

Uchikawa does not anticipate claim 1, as it does not teach all elements recited in claim 1. As support for the above rejection, the Examiner refers only generally to the claims of Uchikawa as teaching a protecting layer on the catalyst as recited in claim 1 of the present invention without specifically citing portions of specification or drawings of Uchikawa.

Uchikawa, which relates to an apparatus for sensing gas (oxygen), fails to teach a ceramic carrier that is capable of supporting a catalyst component directly on the surface of a ceramic substrate and a catalyst supported on the ceramic carrier, where catalyst particles are provided with an anti-evaporation material at least on the outside surface thereof, as claimed. Specifically,

the Examiner does not provide any support or reasoning for Uchikawa teaching "...a ceramic carrier capable of supporting a catalyst component directly on the surface of a ceramic substrate...".

In view of the above noted lack of teaching in Uchikawa, Applicants assert that Uchikawa does not teach all elements recited in claim 1, and therefore respectfully request that the Examiner's rejection under 35 USC 102(b) of claim 1, as well as claims 2-7 that depend therefrom, be withdrawn.

Claims 18 – 20 were rejected under 35 USC 102(e) as being anticipated by Deeba et al. (U.S. Patent No. 6,497,848). This rejection is respectfully traversed.

Claim 18 recites:

A ceramic catalyst body comprising a ceramic carrier capable of supporting a catalyst directly on the surface of a ceramic substrate and a catalyst component supported on the ceramic carrier, wherein a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified.

Deeba does not anticipate claim 18, as it does not teach all elements recited in claim 18. More specifically, Deeba does not teach a ceramic carrier that is capable of supporting a catalyst component directly on the surface of a ceramic substrate and a catalyst supported on the ceramic carrier, as claimed. As support for the above rejection, the Examiner refers only generally to column 1, line 20 and the claims of Deeba apparently for the teaching of a catalytic trap as recited in claim 18 of the present invention. However, the Examiner does not provide any support for Deeba teaching "...a ceramic carrier capable of supporting a catalyst component directly on the surface of a ceramic substrate...".

In view of the above noted lack of teaching in Deeba, Applicants assert that Deeba does not teach all elements recited in claim 18, and therefore respectfully request that the Examiner's rejection under 35 USC 102(e) of claim 18, as well as claims 19 and 20 that depend therefrom, be withdrawn.

Claims 1 – 16 and 18 – 32 were rejected under 35 USC 103(a) as being unpatentable over Beauseigneur et al. (U.S. Patent No. 5,334,570) in view of each Deeba and Uchikawa. This rejection is respectfully traversed.

Deeba and Uchikawa are inapplicable for the above discussed reasons.

Beauseigneur discloses a porous catalyst support including a ceramic substrate and colloidal particles bonded to a metal catalyst and applied to the ceramic substrate. However, the Examiner should note that the colloidal particles in Beauseigneur are not catalyst particles, but rather are essentially oxide particles in which a catalyst is dispersed. More specifically, the colloidal particles are part of a washcoat layer for increasing the surface area of the catalyst support. Therefore, the catalyst is not loaded directly onto a ceramic substrate surface as recited in, for example, claim 1.

In view of the above noted lack of teaching in Uchikawa, Deeba, and Beauseigneur, Applicants assert that this three-way combination of references does not render the present invention obvious as recited in independent claims 1, 18, 20 and 22, and therefore respectfully request that the Examiner's rejection under 35 USC 103(a) of these claims, as well as all claims that depend therefrom, be withdrawn.

In addition, Applicants further traverse the Examiner's rejection, as Uchikawa is not analogous to the present invention. . In order for the Examiner to rely on a reference as a basis for an obvious rejection, the reference must be analogous to the Applicant's invention. The

reference is analogous if it is in the field of Applicant's endeavor or, if not, is reasonably pertinent to the particular problem with which the inventor was concerned. (See *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992), MPEP 2141.01(a) Rev. 1, Feb. 2003.) Uchikawa relates to an apparatus for sensing gas (oxygen) and therefore belongs to a different technical field from catalyst bodies.

Further evidence that Uchikawa is nonanalogous art is shown by the fact that Uchikawa appears to be classified differently than Deeba and Beauseigneur. Also, the official search record of Uchikawa shows that the class/subclasses searched are completely different than in Deeba and Beauseigneur. "Patent Office classification of references and...the official search notes are some evidence of nonanaology or analogy." (See MPEP 2141.01(a) Rev. 1, Feb. 2003.)

In view of the Examiner's attempt to utilize at least one reference from a non-analogous technical field, Applicants assert that the Examiner used hindsight in order to reconstruct the present invention. Specifically, it appears that the Examiner has reconstructed the claimed invention by picking references from non-analogous technical fields and using Applicants' invention as a blue print to result in the claimed invention.

Claims 1 – 16 and 18 - 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 41 of co-pending application 09/966,723 to Koiki et al. This rejection is respectfully traversed.

MPEP §804 sets forth the factual inquiries per *Graham v. John Deere Co.* for determining whether an obviousness type double patenting rejection is proper:

(A) Determine the scope and content of a patent claim and the prior art relative to a claim in the application at issue;

(B) Determine the differences between the scope and content of the patent claim and the prior art as determined in (A) and the claim in the application at issue;

(C) Determine the level of ordinary skill in the pertinent art; and

(D) Evaluate any objective indicia of nonobviousness.

If a double patenting rejection is determined to be proper in view of the above factual inquires, an obviousness type double patenting rejection should make clear:

(A) The difference between the inventions defined by the conflicting claims – a claim in the patent compared to a claim in the application; and

(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection (well as the numerous other double patenting rejections issued by the Examiner in the present Office Action that will be discussed below) does not comply with the requirements of MPEP §804. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

In addition, the Examiner should note that application 09/966,723 was filed on October 1, 2001, which is later than the filing date of the present application (September 24, 2001).

Therefore, assuming arguendo that a double patenting rejection is proper, it appears that the Examiner should have applied a two-way test for determining obviousness per MPEP 804 (B)(1)(b) (August 2001). However, the Examiner's remarks supporting this rejection are devoid of any discussion regarding this issue.

Regarding the merits of the Examiner's rejection, the claims of application 09/966,723 are directed to a ceramic carrier capable of supporting a catalyst component directly on the surface of a ceramic substrate, wherein the ceramic substrate is provided with a requisite multitude of cells that are substantially parallel to each other, with the inside thereof serving as a gas flow passage (emphasis added). The claims of the present application contain no similar limitation, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to set forth why the claims of the present application are an obvious variation of the claims in application 09/966,723, and in view of the possible applicability of the above two-way test for obviousness, why the claims of application 09/966,723 are an obvious variation of those in the present application. Therefore, as the claims of the present application are not obvious variations of, and are patentably distinct from, those in application 09/966,723, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 18 of co-pending application 09/960,361 to Tanaka et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804 set forth above. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

Regarding the merits of the Examiner's rejection, the claims of application 09/960,361 are directed to a ceramic catalyst body wherein catalyst components of a particular size are loaded onto a ceramic support having a large number of pores enabling the catalyst components to be loaded directly onto a base ceramic surface (e.g. claim 1) or wherein the base ceramic has cordierite for its main component and/or a metal element substituted for constituent elements of the base ceramic (e.g. claims 8, 16, 17).

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18). Further, the Office Action fails to set forth why the claims of the present application are an obvious variation of the claims in application 09/960,361.

Therefore, as the claims of the present application are not obvious variations of, and are patentably distinct from, those in application 09/960,361, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 21 of co-pending application 09/961,151 to Kondo et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804 set forth above. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

Regarding the merits of the Examiner's rejection, the claims of application 09/961,151 contain limitations that differ significantly from those of the present application. For example, claim 1 of application 09/961,151 requires a different quantity of catalyst at a middle portion of its carrier than at a peripheral portion. Claim 2 of application 09/961,151 requires a different surface area at a middle portion of the carrier.

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

In view of the above, the claims of the present application are not obvious variations of the claims of application 09/961,151, as required for an obviousness type double patenting rejection, and are patentably distinct from those claims. Furthermore, the Office Action fails to indicate why the claims of the present application are an obvious variation of the claims in application 09/961,151 as required by MPEP §804. Therefore, the double patenting rejection based on application 09/961,151 is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 29 of co-pending application 10/180,033 to Tanaka et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

In addition, the Examiner should note that application 10/180,033 was filed on June 27, 2002 which is later than the filing date of the present application (September 24, 2001). Therefore, assuming arguendo that a double patenting rejection is proper, it appears that the Examiner should have applied a two-way test for determining obviousness per MPEP 804 (B)(1)(b) (August 2001). However, the Examiner's remarks supporting this rejection are devoid of any discussion regarding this issue.

Regarding the merits of the Examiner's rejection, the claims of the present application are patentably distinct from those of application 10/180,033. Among other things, the claims of application 10/180,033 require a honeycomb structure and a staggered arrangement.

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to set forth why the claims of the present application are an obvious variation of the claims in application 10/180,033, and in view of the possible

applicability of the above two-way test for obviousness, why the claims of application 10/180,033 are an obvious variation of those in the present application. Therefore, as the claims of the present application are not obvious variations of, and are patentably distinct from, those in application 10/180,033, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 11 of co-pending application 09/961,203 to Nakanishi et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804 set forth above. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

Regarding the merits of the Examiner's rejection, the claims of application 09/961,203 contain limitations that differ significantly from those of the present application. For example, the claims of application 09/961,203 require a ceramic with metal elements having NOx absorbent capacity. No similar limitation appears in the claims of the present application.

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to indicate why the claims of the present application are obvious variations of the claims of application 09/961,203. The claims of the present application

in fact are not an obvious variation of the claims in application 09/961,203, but are patentably distinct from those claims. Therefore, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 11 of co-pending application 10/255,095 to Kondo et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

In addition, the Examiner should note that application 10/255,095 was filed on September 26, 2002, which is later than the filing date of the present application (September 24, 2001). Therefore, assuming arguendo that a double patenting rejection is proper, it appears that the Examiner should have applied a two-way test for determining obviousness per MPEP 804 (B)(1)(b) (August 2001). However, the Examiner's remarks supporting this rejection are devoid of any discussion regarding this issue.

Regarding the merits of the Examiner's rejection, the claims of application 10/255,095 are directed to a gas concentration detection element including a catalyst layer formed outside a detection electrode and comprising ceramic support particles and a catalyst component supported by the ceramic support particles through a chemical bond.

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream

flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to indicate why the claims of the present application are obvious variations of the claims of application 10/255,095 and in view of the possible applicability of the above two-way test for obviousness, why the claims of application 10/255,095 are an obvious variation of those in the present application. The claims of the present application in fact are not an obvious variation of the claims in application 10/255,095, but are patentably distinct from those claims. Therefore, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 45 of co-pending application 10/103,568 to Tanaka et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

In addition, the Examiner should note that application 10/103,568 was filed on March 22, 2002, which is later than the filing date of the present application (September 24, 2001). Therefore, it appears that the Examiner should have applied a two-way test for determining obviousness per MPEP 804 (B)(1)(b) (August 2001). However, the Examiner's remarks supporting this rejection are devoid of any discussion regarding this issue.

Regarding the merits of the Examiner's rejection, the claims of application 10/103,568 are directed to a ceramic body in which one or more elements constituting a ceramic substrate

are substituted with elements other than constituent elements, and a catalyst can be directly supported on the substituting element.

The claims of the present application contain no similar limitations, but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to indicate why the claims of the present application are obvious variations of the claims of application 10/103,568 and in view of the possible applicability of the above two-way test for obviousness, why the claims of application 10/103,568 are an obvious variation of those in the present application. The claims of the present application in fact are not an obvious variation of the claims in application 10/103,568, but are patentably distinct from those claims. Therefore, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

Claims 1 – 16 and 18 – 32 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 14 of co-pending application 10/202,826 to Tanaka et al. This rejection is respectfully traversed.

As is evident upon review of the Examiner's above double patenting rejection, the Examiner's rejection does not comply with the requirements of MPEP §804. Further, the reasoning given to support these rejections is deficient in view of the requirements set forth by MPEP §804.

In addition, the Examiner should note that application 10/202,826 was filed on July 26, 2002, which is later than the filing date of the present application (September 24, 2001).

Therefore, assuming arguendo that a double patenting rejection is proper, it appears that the Examiner should have applied a two-way test for determining obviousness per MPEP 804 (B)(1)(b) (August 2001). However, the Examiner's remarks supporting this rejection are devoid of any discussion regarding this issue.

Regarding the merits of the Examiner's rejection, the claims of application 10/202,826 are directed to a catalyst made of a compound containing no chlorine. The claims of the present application include no similar limitations, but rather but rather are directed to a ceramic catalyst body in which an anti-evaporation layer is formed at least in part on the outer surface of the catalyst particles (e.g. claim 1) and to a ceramic catalyst body in which a trap layer is provided at a position near an end face of the ceramic carrier in an upstream flow direction of gas to be purified so as to trap a catalyst poisoning component included in the gas to be purified (e.g. claim 18).

Further, the Office Action fails to indicate why the claims of the present application are obvious variations of the claims of application 10/202,826 and, in view of the possible applicability of the above two-way test for obviousness, why the claims of application 10/202,826 are an obvious variation of those in the present application. The claims of the present application in fact are not an obvious variation of the claims in application 10/202,826, but are patentably distinct from those claims. Therefore, the Examiner's provisional double patenting rejection is improper and should be withdrawn.

In view of the above remarks, Applicants respectfully request that the Examiner review and carefully consider the detailed reasoning and explanation that must be provided with a non-statutory double patenting rejection prior to preparing a response to this Amendment, as the above double patenting rejections issued in the present Office Action clearly do not meet the requirements of MPEP §804.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

A Request for a three-month extension of time and the corresponding extension fee are being submitted concurrently herewith. Please charge any additional unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,

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